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## NOTICE OF ALLOWANCE AND FEE(S) DUE

48980 7590 12/31/2008

YOUNG & BASILE, P.C.  
3001 WEST BIG BEAVER ROAD  
SUITE 624  
TROY, MI 48084

EXAMINER

VASUDEVA, AJAY

ART UNIT

PAPER NUMBER

3617

DATE MAILED: 12/31/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,372	01/18/2005	Christopher Paul Darby	ENL-346-A	1322

TITLE OF INVENTION: AMPHIBIOUS VEHICLE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	03/31/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to:** Mail **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

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**TROY, MI 48084**

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

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10/522,372	01/18/2005	Christopher Paul Darby	ENL-346-A	1322

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nonprovisional	YES	\$755	\$300	\$0	\$1055	03/31/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
VASUDEVA, AJAY	3617	440-012500

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB-122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB-47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_  
 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_  
 Typed or printed name \_\_\_\_\_ Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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YOUNG & BASILE, P.C. 3001 WEST BIG BEAVER ROAD SUITE 624 TROY, MI 48084				
			ART UNIT	PAPER NUMBER
			3617	
DATE MAILED: 12/31/2008				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability****Application No.**

10/522,372

**Applicant(s)**

DARBY ET AL.

**Examiner**

Ajay Vasudeva

**Art Unit**

3617

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 4/14/08 and the interview conducted 12/15/08.
2. ☒ The allowed claim(s) is/are 16-24.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Denise Glassmeyer on 12/15/2008.

2. The application has been amended as follows:

**In the claims** (see Applicant's amendment filed 4/14/2008)

- **Claims 1, 3-8, 10 and 12-15 have been cancelled.**
- **New claims 16-24 have been added, as follows:**

-- **Claim 16. An amphibious vehicle adapted for use on land and on water including:  
a vehicle body;**

**at least one trim tab, for adjusting the trim of the amphibious vehicle when  
it is in a marine mode, the at least one trim tab connected to the vehicle body and  
movable relative to the vehicle body between a retracted position and any one of a range  
of operational positions; and**

**a control system for controlling the position of the at least one trim tab,**

the control system including detecting means for detecting at least one mode change event and tab actuation means for moving the at least one trim tab relative to the vehicle body,

the control system being adapted to automatically move the at least one trim tab either into the retracted position or into any one of a range of operational positions according to the mode change event detected,

wherein the mode change event, detectable by the detecting means, is a first mode change event indicative of an onset of transition into a marine mode from a terrestrial mode and the control system is adapted to move the at least one tab into one of a range of operational positions on detection of the said first mode change event

wherein the detecting means are capable of detecting selection of reverse propulsion in a marine mode, and the control system is adapted to automatically move the at least one trim tab into the retracted position on detection of the selection of reverse propulsion; and

wherein the detecting means are capable of detecting a selection of forward propulsion when the vehicle is moving in the reverse direction in a marine mode, and the control system is adapted to automatically move the at least one trim tab into any one of a range of operational positions on the selection of forward propulsion.

**Claim 17.** An amphibious vehicle having a transom section, adapted for use on land and on water including:

a vehicle body;

at least one trim tab, for adjusting the trim of the amphibious vehicle when it is in a marine mode, the at least one trim tab connected to the vehicle body at a

location proximate the transom section, wherein each trim tab is independently movable relative to the vehicle body between a retracted position and any one of a range of operational positions; and

a control system for controlling the position of the at least one trim tab including detecting means for detecting at least one mode change event and tab actuation means for moving the at least one trim tab relative to the vehicle body, the control system being adapted to automatically move the at least one trim tab either into the retracted position or into any one of a range of operational positions according to the mode change event detected

wherein the control system includes means for signaling an operator on detection of at least one event, wherein the mode change event, detectable by the detecting means, is a first mode change event indicative of an onset of transition into a marine mode from a terrestrial mode and the control system is adapted to move the at least one tab into one of a range of operational positions on detection of the said first mode change event.

Claim 18. An amphibious vehicle according to claim 17, in which one of the first mode change event and a further mode change event, detectable by the detecting means, is a second mode change event indicative of an onset of transition into the terrestrial mode from a marine mode and the control system is adapted to automatically move the at least one trim tab into the retracted position on detection of the said second mode change event.

**Claim 19.** A method for controlling the trim tab system of the amphibious vehicle according to claim 18 including the steps of automatically detecting the mode change event, and on detection of the mode change event automatically moving the at least one trim tab either into the retracted position or into said any one of the range of operational positions according to the event detected wherein the mode change event detected is an onset of transition into the terrestrial mode from the marine mode.

**Claim 20.** A method for controlling the trim tab system of the amphibious vehicle according to claim 17 including the steps of automatically detecting the mode change event, and on detection of the mode change event automatically moving the at least one trim tab either into the retracted position or into said any one of the range of operational positions according to the event detected wherein the mode change event detected is an onset of transition into the marine mode from the terrestrial mode.

**Claim 21.** An amphibious vehicle, adapted for use on land and on water including:  
a vehicle body;  
at least one trim tab, for adjusting the trim of the amphibious vehicle when it is in a marine mode, connected to the vehicle body and movable relative to the vehicle body between a retracted position and any one of a range of operational positions; and  
a control system for controlling the position of the at least one trim tab including detecting means for detecting at least one mode change event and tab



actuation means for moving the at least one trim tab relative to the vehicle body, the control system being adapted to automatically move the at least one trim tab either into the retracted position or into any one of a range of operational positions according to the mode change event detected in which the vehicle has a set of wheels for supporting the vehicle when it is in terrestrial mode, and the control system includes means for retracting the set of wheels on detection of a transition into marine mode and means for deploying the set of wheels on detection of a transition into terrestrial mode.

**Claim 22.** An amphibious vehicle, adapted for use on land and on water including:  
a vehicle body;

at least one trim tab, for adjusting the trim of the amphibious vehicle when it is in a marine mode, connected to the vehicle body and movable relative to the vehicle body between a retracted position and any one of a range of operational positions; and

a control system for controlling the position of the at least one trim tab including detecting means for detecting at least one mode change event and tab actuation means for moving the at least one trim tab relative to the vehicle body, the control system being adapted to automatically move the at least one trim tab either into the retracted position or into any one of a range of operational positions according to the mode change event detected

wherein the vehicle has a jet drive for propelling the vehicle when it is in marine mode and a reversing bucket, and the control system includes means for deploying the reversing bucket on detection of selection of reverse propulsion.

**Claim 23.** An amphibious vehicle adapted for use on land and on water including:  
a vehicle body;

at least one trim tab, for adjusting the trim of the amphibious vehicle when it is in a marine mode, connected to the vehicle body and movable relative to the vehicle body between a retracted position and any one of a range of operational positions; and

a control system for controlling the position of the at least one trim tab including detecting means for detecting at least one mode change event and tab actuation means for moving the at least one trim tab relative to the vehicle body, the control system being adapted to automatically move the at least one trim tab either into the retracted position or into any one of a range of operational positions according to the mode change event detected;

wherein the mode change event, detectable by the detecting means, is a first mode change indicative of an onset of transition into a marine mode from a terrestrial mode and the control system is adapted to move the at least one tab into one of a range of operational positions on detection of the said first mode change event;

wherein the detecting means are capable of detecting selection of reverse propulsion in a marine mode, and the control system is adapted to automatically move the at least one trim tab into the retracted position on detection of the selection of reverse propulsion; and

wherein the detecting means are capable of detecting a selection of forward propulsion when the vehicle is moving in the reverse direction in a marine mode, and the control system is adapted to automatically move the at least one trim tab into any of the range of operational positions on the selection of forward propulsion.

**Claim 24. An amphibious vehicle adapted for use on land and on water including;  
a vehicle body;**

**at least one trim tab, for adjusting the trim of the amphibious vehicle when  
it is in a marine mode, connected to the vehicle body and movable relative to the vehicle  
body between a retracted position and any one of a range of operational positions; and**

**a control system for controlling the position of the at least one trim tab  
including detecting means for detecting at least one mode change event and tab  
actuation means for moving the at least one trim tab relative to the vehicle body, the  
control system being adapted to automatically move the at least one trim tab either into  
the retracted position or into any one of a range of operational positions according to the  
mode change event detected,**

**wherein the vehicle has a jet drive for propelling the vehicle when it is in  
marine mode and a reversing bucket, and the control system includes means for  
deploying the reversing bucket on detection of selection of reverse propulsion. –**

3. In the above Examiner's amendment, the new independent claim 16 corresponds to the previously presented claims 1, 4 and 5; the new independent claims 17, 21, 22 and 24 correspond to the previously allowed claims 6, 7, 8 and 15, respectively, with minor formatting changes; and the new independent claim 23 corresponds to the previously presented claims 13 and 14.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay Vasudeva whose telephone number is (571) 272-6689. The examiner can normally be reached on Monday-Friday 12:00 – 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ajay Vasudeva/  
Primary Examiner  
Art Unit 3617